

# TRANSCEND

GOING ABOVE & BEYOND, MAKING TRANSPORTATION SUSTAINABLE

Issue 1, January 2015

## SUSTAINABILITY IN TRANSPORTATION

Welcome to Transcend, the Maryland Department of Transportation's (MDOT) environmental newsletter. This quarterly publication is intended to provide information and resources to MDOT employees that will help make our organization environmentally sustainable.

MDOT defines sustainability as creating a transportation system that allows the basic access and development needs of society to be met, safely and in a manner consistent with human and ecosystem health, and promotes equity within and between successive generations. It is affordable, operates fairly and efficiently, and offers a choice of transport mode. It reduces harmful air, water, and noise pollution, waste generation, and resource consumption.

The Secretary's Office of Environment, in conjunction with the Office of Planning and Capital Programming, is responsible for the Department-wide development, implementation,

oversight, coordination and support for environmental programs and initiatives. The Office of Environment is committed to providing, promoting and exchanging outstanding examples of transportation's role in compliance, environmental stewardship and opportunities for sustainability.

Current initiatives underway at the Office of Environment include:

**Enterprise Environmental Information Management System (EEIMS):** An information technology tool that will support MDOT's Department-wide comprehensive environmental management program and will help manage MDOT's administrations' compliance obligations, improve process efficiencies, and track environmental performance over time.

**Environmental Management System:** The framework for continual program

and process improvement through clearly defined roles and responsibilities, planning requirements, budgeting, implementation and operation, and management review.

**Environmental Quality Assurance Audit Program:** An oversight assessment program to evaluate environmental compliance performance across the Department. The program will help identify and track solutions to deficiencies.

**Standards and Guidance Update:** The update will be complete by 2Q 2015. All TBUs will have the opportunity to provide comments on the draft when complete.

**Sustainability Action Plan:** The plan will serve as a guide to incorporating sustainable principles (i.e., environment, society and economy) into all of MDOT's processes—planning, design, construction, operations and maintenance.



Office of Environment  
MDOT | The Secretary's Office





## GRANT OPPORTUNITIES

**Maryland Energy Administration (MEA) Solar Photovoltaic (PV) Systems:** MEA provides [grants](#) for solar PV systems (up to \$60/kW), solar water heating (up to \$20/sq. ft.), and geothermal heating and cooling (up to \$180/ton). Applications due within 12 months of installation.

**MEA Parking Lot PV/Electric Vehicle (EV):** The [Parking Lot PV/EV Grant Program](#) combines Maryland's Renewable Portfolio Standard goals for solar with its ongoing support of EV infrastructure. MEA awards funds to qualified applicants wishing to install a parking lot solar PV canopy with EV charging equipment through this program. Grants will be allocated on a competitive basis in the amount of \$500 per kW installed, with a grant cap of \$250,000 per project. Applications must be received by March 2, 2015.

**MEA Demand Response & Building Automation Grants:** MEA is offering [grants](#) for projects that leverage state-of-the-art power controls, communication, and building automation technologies that participate in Demand Response markets or programs. MEA will cover up to 50 percent of project costs. Applications are due by February 19, 2015.

**MEA Wind Energy:** The Clean Energy Grant Program for wind, entitled [Windswept](#), offers Maryland residents, businesses, non-profits and State Agencies the opportunity to install and manage their own wind energy systems. The program is designed to help satisfy [Maryland's Renewable Portfolio Standard \(RPS\)](#), requiring 20 percent of Maryland's Electricity be generated from renewable energy sources by 2022. Grant amounts are \$3,000 per kilowatt of normalized capacity (normalized system capacity rated at wind speeds of 11 m/s) not to exceed \$100,000 in total.

**MEA Alternative Fueled Vehicles:** The Maryland [Freedom Fleet Voucher Program](#) provides financial assistance for the purchase of new and converted alternative fueled vehicles registered in the state of Maryland. Incentive amounts vary, not to exceed \$20,000, and are based on gross vehicle weight. Applications accepted through May 8, 2015.

## PROJECT HIGHLIGHT

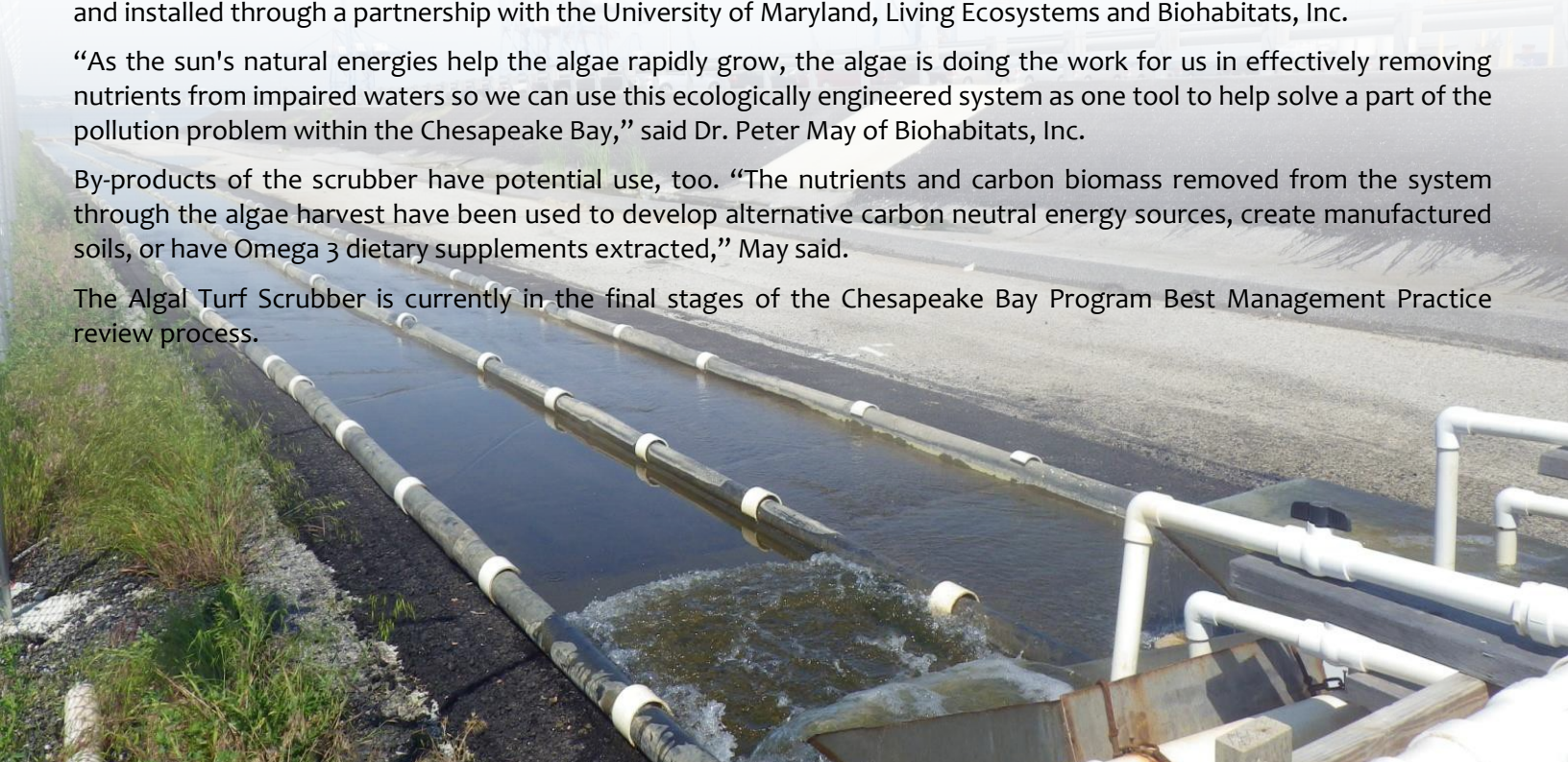
The Maryland Port Administration (MPA) recently received a first place award for its [Algal Turf Scrubber®](#) from the Chesapeake Stormwater Network. The network presents annual awards for best management practices in an urban setting. The MPA received the top 2014 award in the category of Innovative Best Management Practice.

The Algal Turf Scrubber is in operation at the Port of Baltimore's Dundalk Marine Terminal. The 300 foot-long scrubber pumps water from Baltimore's Patapsco River into a shallow screened trough. The water flows through the trough, where the growth of natural algae takes up nutrients from the water and releases dissolved oxygen. This improves water quality by reducing nutrients, which are the major cause of water pollution in the Chesapeake Bay region, and increasing the amount of dissolved oxygen available to fish and other aquatic creatures. The scrubber was designed and installed through a partnership with the University of Maryland, Living Ecosystems and Biohabitats, Inc.

"As the sun's natural energies help the algae rapidly grow, the algae is doing the work for us in effectively removing nutrients from impaired waters so we can use this ecologically engineered system as one tool to help solve a part of the pollution problem within the Chesapeake Bay," said Dr. Peter May of Biohabitats, Inc.

By-products of the scrubber have potential use, too. "The nutrients and carbon biomass removed from the system through the algae harvest have been used to develop alternative carbon neutral energy sources, create manufactured soils, or have Omega 3 dietary supplements extracted," May said.

The Algal Turf Scrubber is currently in the final stages of the Chesapeake Bay Program Best Management Practice review process.





# REGULATORY & LEGISLATIVE UPDATES

## FEDERAL

### FINAL:

The USEPA finalized new safeguards that promote responsible hazardous secondary materials recycling. The [final rule modifies the USEPA's 2008 Definition of Solid Waste rule](#) to ensure it protects human health and the environment from the mismanagement of hazardous secondary materials intended for recycling, while promoting sustainability through the encouragement of safe and environmentally responsible recycling of such materials. Docket: EPA-HQ-RCRA-2010-0742

### PROPOSED:

USEPA is moving forward with a [rulemaking process](#) to **potentially regulate greenhouse gas (GHG) emissions, specifically carbon dioxide (CO<sub>2</sub>) from aircraft**. The rulemaking is in response to: (1) a 2007 petition that requested USEPA make an "endangerment finding" for aircraft GHGs and regulate these emissions under the Clean Air Act (CAA); and (2) a 2012 D.C. District Court ruling that the CAA requires USEPA to make a final determination on whether aircraft GHG emissions cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare. Under USEPA's current schedule, it would propose endangerment and cause/contribute findings and domestically release an advance notice of public rulemaking in late April 2015. USEPA anticipates it will take approximately another year to finalize the findings.

The Pipeline and Hazardous Materials Safety Administration has **requested input on ways to improve the Emergency Response Guidebook (ERG)** as it develops the 2016 version (ERG2016) ([79 FR 52106](#)).

USEPA released the **Final 2012 and Preliminary 2014 Effluent Guidelines Program Plans** for public review and comment ([79 FR 55472](#)). The Clean Water

Act (CWA) requires USEPA to publish a plan for new and revised effluent guidelines every two years. The program plan identifies any new or existing industrial categories selected for effluent guidelines rulemaking and provides a schedule for such rulemaking.

### OTHER:

The Council on Environmental Quality (CEQ) published [draft guidance](#), Effective Use of Programmatic National Environmental Policy Act (NEPA) Reviews ([79 FR 50578](#)). Programmatic reviews may be followed by site-specific reviews, known as tiering, or they may serve as stand-alone NEPA reviews. This guidance encourages a more consistent approach to programmatic NEPA reviews

## STATE

### FINAL:

The Maryland Comptroller of the Treasury [adopted](#) amendments to the motor fuel inspection regulations at COMAR 03.03.05.04 that **lower the maximum sulfur content of No. 1 and No. 2 fuel oil** to 0.20 on or after November 1, 2014 and 0.05 on or after July 1, 2016.

Maryland Department of Environment (MDE) has [adopted](#) amendments to the **water pollution permit regulations regarding general discharge permits and fees** (Regulations .09 and .09-1). The amendments update regulations to include additional related discharge categories of dewatering (such as aquifer testing, construction dewatering, and foundation drainage) and groundwater remediation. The amendments became effective on September 29, 2014.

The Maryland Critical Area Commission for the Chesapeake and Atlantic Coastal Bays has [amended regulations to update provisions by incorporating changes made to other state regulations](#). The rulemaking: (1) removes provisions that

are obsolete; (2) updates the drafting style of the regulations; (3) streamlines the regulations; and (4) inserts climate change provisions into the regulations that govern state agency actions on state-owned lands. The Commission was required, by Executive Order (EO) 01.01.2012.29, to evaluate existing regulations and policies for state agency actions resulting in development on state-owned land. After the evaluation, the EO required the Commission to consider the adoption of new or revised provisions that address climate change and the risk of sea level rise and other extreme weather-related impacts. Effective December 22, 2014.

### PROPOSED:

MDE proposed a [rulemaking](#) that requires a responsible person who is in possession of a sample result or other environmental assessment that **indicates the presence of a released hazardous substance or substances in the environment** at or above a threshold established by the Department **to report the finding promptly to the Department**. The proposed action would implement the requirements of Environment Article §7-222(d), Annotated Code of Maryland. Although this proposed action generally exempts state agencies from reporting, it could affect state agencies' ability to procure property.

In accordance with the Regulatory Review and Evaluation Act, State Government Article, §§10-130 — 10-139, Annotated Code of Maryland, **MDOT is currently reviewing and evaluating existing regulations**. The purpose of this review and evaluation is to determine whether existing regulations continue to accomplish the purposes for which they were adopted, clarify ambiguous or unclear language, and repeal obsolete or duplicative provisions. MDOT would like to provide interested parties with an opportunity to participate in the review and evaluation process by submitting comments on the regulations.





## EVENTS & TRAINING

### TRB 94th ANNUAL MEETING

The meeting will be held in Washington, D.C. January 11-15, 2015 at the Walter E. Washington Convention Center. The program covers all transportation modes, with more than 5,000 presentations in nearly 750 sessions and workshops. The spotlight theme for the [2015 TRB Annual Meeting](#) is, "Corridors to the Future: Transportation and Technology." MDOT is a member of TRB so enrollment is free.

### GREEN PURCHASING FAIR

The Metropolitan Washington Council of Governments (MWCOG) is hosting a [Green Purchasing Vendors' Fair](#) on January 29, 2015 at the MWCOG Training Center in Washington, D.C. Registration is free.

### MDOT EARTH DAY

The 2015 MDOT Earth Day Educational Outreach Conference will be held on April 21, 2015 at the Maritime Institute.

The event will consist of educational displays, classes and films. Lunch will be provided for the first 200 registrants (registration instructions to be announced February 2015). All MDOT TBUs will participate in the event along with other state agencies, federal, non-profit, and private organizations.

### ONLINE TRAINING

RCRA-related [online courses](#), seminars, webinars, podcasts, and videos are posted throughout USEPA's waste website.

USEPA's **Watershed Academy** is sponsoring free [webcast seminars](#) for local watershed organizations, municipal leaders, and others.

USEPA offers [training courses](#), workshops, and webcasts that explain the regulatory framework and technical considerations of the **NPDES permit program**. They are designed for permit writers, dischargers, USEPA officials, and other interested parties.

The **National Climate Change and Wildlife Science Center** is partnering with the National Conservation Training Center to offer a [webinar series](#) to inform scientists, land managers, and the public about potential and predicted climate change impacts on fish and wildlife, and to help guide resource management decisions across the United States.

### VOLUNTEER OPPORTUNITIES

The Maryland Department of Natural Resources (DNR) is seeking [TEAM](#) (Teaching Environmental Awareness in Maryland) volunteers. DNR's volunteer mission is to educate students about the Chesapeake Bay, coastal and bay marine creatures, and Maryland streams. Volunteers should have an outgoing personality and a strong desire to help students understand and care for their natural environment. Volunteers must have their own transportation as they will be traveling to schools.

**COMMENTS?** THE TSO OFFICE OF ENVIRONMENT WELCOMES INFORMATION, NEWS, PHOTOS, ARTICLES, ANNOUNCEMENTS, SUGGESTIONS, QUESTIONS, ETC. TO CONTRIBUTE, EMAIL LAURA ROGERS AT [LROGERS1@MDOT.MARYLAND.GOV](mailto:LROGERS1@MDOT.MARYLAND.GOV)